

L31 ANSWER 1 OF 25 MEDLINE on STN
 ACCESSION NUMBER: 2006350431 MEDLINE <<LOGINID::20080306>>
 DOCUMENT NUMBER: PubMed ID: 16764118
 TITLE: [The role of cytokines in the induction of
labor, cervical ripening and rupture of
 the fetal membranes].
 Zur Rolle von Zytokinen bei Weheninduktion, Zervixreifung
 und Blasensprung.
 AUTHOR: Winkler M; Rath W
 CORPORATE SOURCE: Frauenklinik fur Gynakologie und Geburtshilfe der
 Rheinisch-Westfalischen Technischen Hochschule (RWTH)
 Aachen.
 SOURCE: Zeitschrift fur Geburtshilfe und Neonatologie, (1996) Vol.
 200 Suppl 1, pp. 1-12. Ref: 81
 Journal code: 9508901. ISSN: 0948-2393.
 PUB. COUNTRY: Germany: Germany, Federal Republic of
 DOCUMENT TYPE: (ENGLISH ABSTRACT)
 Journal; Article; (JOURNAL ARTICLE)
 General Review; (REVIEW)
 LANGUAGE: German
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 200608
 ENTRY DATE: Entered STN: 13 Jun 2006
 Last Updated on STN: 3 Aug 2006
 Entered Medline: 2 Aug 2006

AB Even today prematurity is the major cause of perinatal mortality.
 Prematurity has multiple causes. There is a growing body of evidence
 supporting the association between silent intrauterine infection and
 preterm birth. Bacterial products may activate macrophages ubiquitous
 present in the decidua, placenta and fetal membranes. These cells after
 activation secrete a large variety of mediators including tumour necrosis
 factor alpha (TNFalpha) and interleukin (IL)-1. Besides these cytokines
 IL-2, IL-3, IL-4, IL-6, IL-8, IL-10, epidermal growth factor,
 granulocyte-colony stimulating factor and transforming growth factor beta
 have been identified in intrauterine tissues and in the amniotic fluid.
 The majority of these substances (TNFalpha, IL-1, IL-2, IL-3, IL-6) can
 stimulate the prostaglandin-biosynthesis by intrauterine tissues (amnion,
 chorion, decidua), some of them have antiinflammatory effects (IL-10,
 transforming growth factor alpha). These effects are mediated by
 receptors on the target cells; specific receptor antagonists (for example
 for IL-1) were found in high concentrations in amniotic fluid during
 normal pregnancy. This cytokine network is in a sensitive balance and
 probably associated with an uncomplicated course of pregnancy. Systemic
 or localized infections as well as tissue injury initiate the
induction of the prostaglandin synthesis cascade thus leading to
 pregnancy loss via augmented cytokine secretion. Furthermore, cytokines
 may be involved in the regulation of preterm and term cervical
 ripening. The changes in mechanical properties of the cervix
 are associated with a reduction of collagen content and alterations in the
glycosaminoglycan pattern within the cervical
 extracellular matrix. IL-1 can stimulate the synthesis of collagenases,
 and IL-8 may play an important role in the regulation of the invasion of
 neutrophilic granulocytes into the cervical stroma with
 subsequent degranulation and release of proteases. The
 cytokine-stimulated collagenase production in the fetal membranes is
 responsible for the reduction of their tensile strength and may be
 associated with rupture of the membranes. The cytokine network seems to
 be a sensitive regulation system. Disturbances of its balance by
 environmental (e.g. infection) or intrauterine influences (e. g. extension
 by the fetus) may lead to termination of pregnancy.

L31 ANSWER 2 OF 25 MEDLINE on STN
 ACCESSION NUMBER: 96260325 MEDLINE <<LOGINID::20080306>>
 DOCUMENT NUMBER: PubMed ID: 8778003
 TITLE: [The biochemical mechanism of cervical ripening
 after intracervical application of PGE2].
 Biochemiczny mechanizm procesu dojrzewania szyjki macicy
 ciężarnej po miejscowym zastosowaniu prostaglandyny E2.
 AUTHOR: Rechberber T; Postawski K; Skorupski P; Czarnacki J;
 Jakowicki J
 CORPORATE SOURCE: II Kliniki Ginekologii Operacyjnej AM w Lublinie.

SOURCE: Ginekologia polska, (1995 Sep) Vol. 66, No. 9, pp. 492-7.
 Journal code: 0374641. ISSN: 0017-0011.
 PUB. COUNTRY: Poland
 DOCUMENT TYPE: (CLINICAL TRIAL)
 (ENGLISH ABSTRACT)
 Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: Polish
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 199609
 ENTRY DATE: Entered STN: 24 Sep 1996
 Last Updated on STN: 24 Sep 1996
 Entered Medline: 17 Sep 1996

AB The influence of local intracervical application of PGE2 (Prostin E2-Upjohn) on collagenolytic activity as well as extracellular matrix components of human cervix during parturition has been analyzed. The content and extractability of collagen as well as concentration of glycosaminoglycans and hyaluronic acid were investigated. Since we did not find any statistical changes in DNP-peptide collagenolytic activity and investigated extracellular macromolecules of cervical connective tissue we presumed that cervical ripening after local prostaglandin application closely resembles that occurring spontaneously.

L31 ANSWER 3 OF 25 MEDLINE on STN

ACCESSION NUMBER: 95150947 MEDLINE <<LOGINID::20080306>>
 DOCUMENT NUMBER: PubMed ID: 7848214
 TITLE: Prostaglandins and biological control of cervical function.
 AUTHOR: Calder A A
 CORPORATE SOURCE: Department of Obstetrics and Gynaecology, Centre for Reproductive Biology, University of Edinburgh, United Kingdom.
 SOURCE: The Australian & New Zealand journal of obstetrics & gynaecology, (1994 Jun) Vol. 34, No. 3, pp. 347-51. Ref: 18
 Journal code: 0001027. ISSN: 0004-8666.
 PUB. COUNTRY: Australia
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 General Review; (REVIEW)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 199503
 ENTRY DATE: Entered STN: 16 Mar 1995
 Last Updated on STN: 16 Mar 1995
 Entered Medline: 9 Mar 1995

AB The uterine cervix is a vital structure for the success of pregnancy. It must remain firmly closed to contain the developing conceptus within the uterus until the fetus has grown to a stage of maturity appropriate for extra-uterine survival. During the birth process itself, the cervix must undergo the rapid opening known as dilatation to allow the fetus to travel through the birth canal with a minimum of stress and trauma. The process of cervical dilatation must be preceded by the phenomenon of effacement whereby the substance of the cervix shortens and thins out. Both effacement and dilatation would be impossible unless the dense fibrous connective tissue of the cervix had undergone a radical modification. Cervical ripening requires a change of the collagen within the cervical stroma from a highly organised network of tightly bound collagen fibrils to a much looser arrangement whereby the tissue becomes more compliant. This is associated with profound changes in the composition of the ground substance of the cervical stroma with an alteration in the concentration and type of glycosaminoglycans (GAGs) which constitute the proteoglycan complexes. It was formerly assumed that these changes were under the control of those cellular elements within the cervical stroma (fibroblasts and smooth muscle cells) but it seems quite possible that the ripening process is associated with an infiltration of inflammatory cells especially neutrophils. Currently much interest is centering on the possible role of cytokines such as interleukin-8 and there may also be a role in cervical ripening for leukotrienes. (ABSTRACT TRUNCATED AT 250 WORDS)

L31 ANSWER 4 OF 25 MEDLINE on STN

ACCESSION NUMBER: 94050971 MEDLINE <<LOGINID::20080306>>
 DOCUMENT NUMBER: PubMed ID: 8233252
 TITLE: Prostaglandin E2-induced ripening of the human
cervix involves changes in proteoglycan metabolism.
 AUTHOR: Norman M; Ekman G; Malmstrom A
 CORPORATE SOURCE: Department of Obstetrics and Gynecology, Karolinska
 Institutet, Danderyd Hospital, Sweden.
 SOURCE: Obstetrics and gynecology, (1993 Dec) Vol. 82, No. 6, pp.
 1013-20.
 Journal code: 0401101. ISSN: 0029-7844.
 PUB. COUNTRY: United States
 DOCUMENT TYPE: (IN VITRO)
 Journal; Article; (JOURNAL ARTICLE)
 (RESEARCH SUPPORT, NON-U.S. GOV'T)
 LANGUAGE: English
 FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
 ENTRY MONTH: 199312
 ENTRY DATE: Entered STN: 17 Jan 1994
 Last Updated on STN: 17 Jan 1994
 Entered Medline: 21 Dec 1993

AB OBJECTIVE: To elucidate how prostaglandin E2 (PGE2) induces
cervical ripening. METHODS: Cervical biopsies were
 obtained immediately postpartum from women successfully treated with PGE2
 gel intracervically. Six specimens were incubated with [35S]sulfate and
 five were used to characterize the nonlabeled proteoglycan composition.
 In separate experiments, biopsy specimens from three term pregnant women
 with unripe cervices were incubated with PGE2 in organ cultures.
 Proteoglycans were isolated and characterized using ion-exchange and gel
 chromatography and sodium dodecyl sulfate-polyacrylamide gel
 electrophoresis. RESULTS: During PGE2-induced cervical
 ripening, the synthesis of proteoglycans, especially a large chondroitin/
dermatan sulfate proteoglycan and biglycan, increased three- to
 sixfold. This resulted in a net increase in the large proteoglycan in the
 PGE2-treated cervices. In organ culture, on the contrary,
 incubation with PGE2 decreased the proteoglycan synthesis. CONCLUSION:
 Prostaglandin E2-induced cervical ripening is
 accomplished by increased remodeling of the cervical connective
 tissue, involving changed proteoglycan metabolism and composition.

L31 ANSWER 5 OF 25 MEDLINE on STN
 ACCESSION NUMBER: 92135112 MEDLINE <<LOGINID::20080306>>
 DOCUMENT NUMBER: PubMed ID: 1777452
 TITLE: Insufficient remodelling of the uterine connective tissue
 in women with protracted labour.
 AUTHOR: Granstrom L; Ekman G; Malmstrom A
 CORPORATE SOURCE: Department of Obstetrics and Gynaecology, Karolinska
 Institutet, Danderyd Hospital, Sweden.
 SOURCE: British journal of obstetrics and gynaecology, (1991 Dec)
 Vol. 98, No. 12, pp. 1212-6.
 Journal code: 7503752. ISSN: 0306-5456.
 PUB. COUNTRY: ENGLAND: United Kingdom
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 (RESEARCH SUPPORT, NON-U.S. GOV'T)
 LANGUAGE: English
 FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
 ENTRY MONTH: 199203
 ENTRY DATE: Entered STN: 29 Mar 1992
 Last Updated on STN: 29 Mar 1992
 Entered Medline: 10 Mar 1992

AB OBJECTIVE--To investigate the association between a slow progress of
labour and insufficient remodelling of the uterine connective
 tissue. DESIGN--An open comparative study. SETTING--Danderyd Hospital,
 Department of Obstetrics and Gynaecology, referral centre.
 SUBJECTS--Eleven women (study group) in oxytocin augmented labour
 but with an unripe cervix in whom vaginal delivery could not be
 accomplished and 12 women (normal labour group) in normally
 progressing spontaneous labour and a favourable cervix
 but who needed to be delivered by caesarean section due to signs of fetal
 distress. INTERVENTIONS--At caesarean section tissue specimens were
 obtained from the fundus, the isthmus and the cervix uteri.
 MAIN OUTCOME MEASURES--Collagen concentration and extractability,
 collagenolytic activity expressed as DNP-peptide hydrolytic activity and

the concentrations of sulphated glycosaminoglycans (S-GAG) and hyaluronic acid (HA) in the tissue specimens. RESULTS--Statistically significantly higher concentrations and lower extractability of collagen in the isthmus and the cervix uteri was found in women with slow progress of labour compared with those with normal labour. CONCLUSIONS--An insufficient remodelling of the connective tissue in the cervix and isthmus uteri may contribute to slow progress of labour.

L31 ANSWER 6 OF 25 MEDLINE on STN
 ACCESSION NUMBER: 92123938 MEDLINE <<LOGINID::20080306>>
 DOCUMENT NUMBER: PubMed ID: 1663255
 TITLE: Induction of labor and cervical
 maturation using mifepristone (RU 486) in the late pregnant
 rat. Influence of a cyclooxygenase inhibitor (Diclofenac).
 AUTHOR: Cabrol D; Carbonne B; Bienkiewicz A; Dallot E; Alj A E;
 Cedard L
 CORPORATE SOURCE: INSERM U 166, Paris, France.
 SOURCE: Prostaglandins, (1991 Jul) Vol. 42, No. 1, pp. 71-9.
 Journal code: 0320271. ISSN: 0090-6980.
 PUB. COUNTRY: United States
 DOCUMENT TYPE: (COMPARATIVE STUDY)
 Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 199202
 ENTRY DATE: Entered STN: 15 Mar 1992
 Last Updated on STN: 15 Mar 1992
 Entered Medline: 25 Feb 1992

AB The mechanism of action of RU 486 (Mifepristone), an antiprogesterone compound, on labor induction and on cervical maturation, is still not well documented. We have investigated the effect of RU 486, alone and in association with a cyclooxygenase inhibitor (Diclofenac) on the induction of preterm delivery and on concomitant changes in the distribution of cervical glycosaminoglycans (GAGs) in pregnant Wistar rats: a control group (n = 18), a RU 486 treated group (n = 36), and a RU 486 and Diclofenac treated group (n = 15). The results of this study confirm the ability of this antiprogesterone treatment to induce preterm delivery in the rat. This effect was antagonized by cyclooxygenase inhibition, suggesting that the action of RU 486 on labor induction could be mediated by prostaglandins. The absence of an increase in plasma prostaglandin E2 (PGE2) levels in RU 486 treated animals could be explained by local uterine changes in prostaglandin concentrations. Mifepristone also induced some of the biochemical features of cervical maturation (i.e. increased hydration and hyaluronic acid concentration). This effect was not inhibited in Diclofenac treated animals suggesting that factors other than prostaglandins play a role in this phenomenon.

L31 ANSWER 7 OF 25 MEDLINE on STN
 ACCESSION NUMBER: 91112348 MEDLINE <<LOGINID::20080306>>
 DOCUMENT NUMBER: PubMed ID: 2535030
 TITLE: Cervical connective tissue in relation to
 pregnancy, labour, and treatment with
 prostaglandin E2.
 AUTHOR: Ulldbjerg N
 CORPORATE SOURCE: Department of Obstetrics and Gynecology, University of
 Aarhus, Denmark.
 SOURCE: Acta obstetrica et gynecologica Scandinavica. Supplement,
 (1989) Vol. 148, pp. 1-40.
 Journal code: 0337655. ISSN: 0300-8835.
 PUB. COUNTRY: Sweden
 DOCUMENT TYPE: (IN VITRO)
 Journal; Article; (JOURNAL ARTICLE)
 (RESEARCH SUPPORT, NON-U.S. GOV'T)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 199102
 ENTRY DATE: Entered STN: 29 Mar 1991
 Last Updated on STN: 29 Mar 1991
 Entered Medline: 27 Feb 1991

L31 ANSWER 8 OF 25 MEDLINE on STN
 ACCESSION NUMBER: 91106652 MEDLINE <<LOGINID::20080306>>
 DOCUMENT NUMBER: PubMed ID: 2272430
 TITLE: [Principles of physiologic and drug-induced
cervix ripening--recent morphologic and biochemical
 findings].
 Grundlagen der physiologischen und medikamentos induzierten
 Zervixreifung--Neuere morphologische und biochemische
 Befunde.
 AUTHOR: Rath W; Osmers R; Adelman-Grill B C; Stuhlsatz H W;
 Tschesche H; Szeverini M
 CORPORATE SOURCE: Univ.-Frauenklinik Gottingen.
 SOURCE: Geburtshilfe und Frauenheilkunde, (1990 Sep) Vol. 50, No.
 9, pp. 657-64. Ref: 47
 Journal code: 0370732. ISSN: 0016-5751.
 PUB. COUNTRY: GERMANY: Germany, Federal Republic of
 DOCUMENT TYPE: (ENGLISH ABSTRACT)
 Journal; Article; (JOURNAL ARTICLE)
 General Review; (REVIEW)
 LANGUAGE: German
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 199102
 ENTRY DATE: Entered STN: 29 Mar 1991
 Last Updated on STN: 29 Mar 1991
 Entered Medline: 25 Feb 1991

AB Maturation of the cervix during pregnancy is an essential
 pre-requisite for an uncomplicated delivery at term. Physiological
cervical ripening is characterised by a diffuse loosening of the
 collagenous connective tissue with widely scattered collagen fibrils and
 an increased amount of extracellular ground substance. These
 morphological changes are similar to those after prostaglandin
 (PG)-pre-treatment of the cervix. The local application of PG
 leads to a marked multifocal loosening of the collagen fibre bundles with
 "activated" fibroblasts, characterised by a fine granular loosening of the
 cytoplasm, vacuolised enlarged mitochondria and an increased number of
 cytoplasmatic vesicles close to the cell surface. In the course of
 pregnancy the volume of the cervix increases by a significant
 rise in synthesis of collagen, protein, glycosaminoglycan and
 fibronectin. The change in consistency during late pregnancy corresponds
 to a significant decrease in dermatan sulphate coinciding with
 a marked increase in hyaluronic acid concentration associated with
 increased water uptake. Contrary to the already published literature,
 enzymatic collagen degradation does not play an important role in
 physiological cervical maturation. The action of catabolic
 enzymes (collagenases, glycosidases), liberated from polymorphonuclear
 leukocytes invading the extracellular matrix, is responsible for the rapid
 dilatation of the cervix at parturition. This process is
 limited by the immediate postpartum insudation of the cervix by
 plasma containing highly potent proteinase inhibitors (e.g. alpha
 2-macroglobulin). PG-induced cervical ripening is
 associated with a time-limited enzymatic collagen degradation, an
 increased synthesis of non-collagenous proteins and a significant increase
 in hyaluronic acid concentration. Our basic biochemical findings in
cervical ripening and dilatation during parturition may greatly
 contribute to the development of new concepts in the causal treatment of
cervical pathology during pregnancy.

L31 ANSWER 9 OF 25 MEDLINE on STN
 ACCESSION NUMBER: 90074573 MEDLINE <<LOGINID::20080306>>
 DOCUMENT NUMBER: PubMed ID: 2590655
 TITLE: Changes in the connective tissue of corpus and
cervix uteri during ripening and labour
 in term pregnancy.
 AUTHOR: Granstrom L; Ekman G; Ulmsten U; Malmstrom A
 CORPORATE SOURCE: Department of Obstetrics and Gynecology, Karolinska
 Institutet, Danderyd Hospital, Stockholm, Sweden.
 SOURCE: British journal of obstetrics and gynaecology, (1989 Oct)
 Vol. 96, No. 10, pp. 1198-202.
 Journal code: 7503752. ISSN: 0306-5456.
 PUB. COUNTRY: ENGLAND: United Kingdom
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

(RESEARCH SUPPORT, NON-U.S. GOV'T)
 LANGUAGE: English
 FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
 ENTRY MONTH: 199001
 ENTRY DATE: Entered STN: 28 Mar 1990
 Last Updated on STN: 28 Mar 1990
 Entered Medline: 22 Jan 1990

AB The composition of the connective tissue of human cervix and corpus uteri was studied in tissue specimens from seven nonpregnant women and 14 pregnant women, delivered at term by section, to examine spontaneous cervical ripening and labour-induced changes in both the uterine and the cervical connective tissue. The main finding in both the cervix and the corpus was a large (40-60%) decrease of the collagen concentration. The collagen extractability, obtained by pepsin digestion, was increased twofold, suggesting a change of the organization of the collagen fibrils. This reorganization process could also be demonstrated by a large increase of the collagenolytic activity demonstrated with an artificial DNP-peptide substrate. The concentrations of sulphated glycosaminoglycans was lower in pregnant women than in non-pregnant women. The results show that both the cervix and the corpus uteri contain substantial amounts of connective tissue components (collagen, sulphated glycosaminoglycans and hyaluronic acid) and that during ripening, reconstruction of the connective tissue components occurs in both sites. This indicates that the cervical state reflects that of the myometrium.

L31 ANSWER 10 OF 25 MEDLINE on STN
 ACCESSION NUMBER: 79101650 MEDLINE <<LOGINID::20080306>>
 DOCUMENT NUMBER: PubMed ID: 367195
 TITLE: [Cervical dilatation and its clinical significance in women with pathological pregnancy].
 Po vuprosa za tservikalnata dilatatsiia i neinoto klinichno znachenie pri zheni s patologichna bremennost.
 AUTHOR: Penev I
 SOURCE: Akusherstvo i ginekologii a, (1978) Vol. 17, No. 6, pp. 384-91. Ref: 79
 Journal code: 0370455. ISSN: 0324-0959.
 PUB. COUNTRY: Bulgaria
 DOCUMENT TYPE: (ENGLISH ABSTRACT)
 Journal; Article; (JOURNAL ARTICLE)
 General Review; (REVIEW)
 LANGUAGE: Bulgarian
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 197903
 ENTRY DATE: Entered STN: 15 Mar 1990
 Last Updated on STN: 15 Mar 1990
 Entered Medline: 24 Mar 1979

L31 ANSWER 11 OF 25 MEDLINE on STN
 ACCESSION NUMBER: 78233852 MEDLINE <<LOGINID::20080306>>
 DOCUMENT NUMBER: PubMed ID: 615515
 TITLE: Changes in cervical function at parturition.
 AUTHOR: Fitzpatrick R J
 SOURCE: Annales de recherches veterinaires. Annals of veterinary research, (1977) Vol. 8, No. 4, pp. 438-49.
 Journal code: 1267230. ISSN: 0003-4193.
 PUB. COUNTRY: France
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 197809
 ENTRY DATE: Entered STN: 14 Mar 1990
 Last Updated on STN: 3 Feb 1997
 Entered Medline: 15 Sep 1978

AB In sheep and goats changes in the wall of the uterine cervix associated with parturition were studied in relation to the preparturient sequence of endocrine events. Evidence was obtained of separation of collagen fibrils, possibly due to changes in the electrostatic binding of the fibrils by glycosaminoglycans. The mechanical properties of the cervix were investigated quantitatively on isolated tissues by radial loading to destruction, and by progressive extension on a

tensometer; the extension experiments revealed that at parturition (but not before) the cervical wall acts mechanically as if composed of two different tissues, one of which, the collagen layer, changes profoundly at parturition to facilitate dilatation. Resistance to dilatation (compliance) was investigated in vivo using indwelling intracervical balloons which could be inflated with water at standard speed. This permitted serial observations in the same animal during the progress of parturition induced with foetal dexamethasone (sheep) or maternal cloprostenol (goats). Compliance increased progressively in all 13 parturient animals, but not in untreated controls, and this increase occurred coincidentally with the expected fall in progesterone and rise in oestrogen concentrations: it occurred before the preparturient rise in PGF. Meclofenamic acid administration to cloprostenol treated goats successfully delayed the PGF surge and delayed parturition but did not delay the increase in compliance which reached maximum within the 36 hours of treatment with the PG synthetase inhibitor.

L31 ANSWER 12 OF 25 MEDLINE on STN
 ACCESSION NUMBER: 77088121 MEDLINE <<LOGINID::20080306>>
 DOCUMENT NUMBER: PubMed ID: 318871
 TITLE: Control of parturition in man.
 AUTHOR: Liggins G C; Forster C S; Grieves S A; Schwartz A L
 SOURCE: Biology of reproduction, (1977 Feb) Vol. 16, No. 1, pp. 39-56. Ref: 106
 Journal code: 0207224. ISSN: 0006-3363.
 PUB. COUNTRY: United States
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 General Review; (REVIEW)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 197703
 ENTRY DATE: Entered STN: 13 Mar 1990
 Last Updated on STN: 13 Mar 1990
 Entered Medline: 31 Mar 1977

L31 ANSWER 13 OF 25 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights reserved on STN
 ACCESSION NUMBER: 2007156267 EMBASE <<LOGINID::20080306>>
 TITLE: Current principles of the diagnosis and treatment of preterm delivery.
 AUTHOR: Zimmer M.; Pomorski M.; Wiatrowski A.; Fuchs T.; Woyton J.
 CORPORATE SOURCE: M. Zimmer, Department of Human Reproduction and Obstetrics, Silesian Piasts University of Medicine, Dyrekcyjna 5/7, 50-526 Wroclaw, Poland
 SOURCE: Advances in Clinical and Experimental Medicine, (2007) Vol. 16, No. 1, pp. 155-164.
 Refs: 40
 ISSN: 1230-025X CODEN: ACEMC6
 COUNTRY: Poland
 DOCUMENT TYPE: Journal; General Review; (Review)
 FILE SEGMENT: 010 Obstetrics and Gynecology
 030 Clinical and Experimental Pharmacology
 037 Drug Literature Index
 038 Adverse Reactions Titles
 052 Toxicology
 007 Pediatrics and Pediatric Surgery
 LANGUAGE: English
 SUMMARY LANGUAGE: English; Polish
 ENTRY DATE: Entered STN: 26 Apr 2007
 Last Updated on STN: 26 Apr 2007

AB Preterm delivery is one of the main causes of infant mortality in developed countries, and infants who survive require long-term rehabilitation. Therefore it is important to understand the causes of preterm delivery and perform an adequate and early selection of women at risk. This enables surrounding them with intensive supervision and education guided towards prevention and early detection of symptoms of preterm contractions. According to current knowledge, effective prophylaxis of preterm delivery is connected with screening and treatment of asymptomatic bacteriuria in all pregnant women, progestogen administration, and screening for and treatment of asymptomatic bacterial vaginosis in the group at high risk. In the group at high risk, additional actions are necessary: fibronectin marker in cervical

-vaginal smear, regular ultrasonographic evaluation of cervix length, and, in case of its shortening, the use of cervical cerclage and examination for the presence of autoantibodies. Treatment of the threat of preterm delivery consists of assuring the patient's peace and using drugs to restrain contractions. Inefficiency of such treatment is connected with the necessity of administering glucocorticosteroids and determining a way of labor termination that will guarantee maximum protection of the fetus. .COPYRGT. Copyright by Silesian Piasts University of Medicine in Wroclaw.

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ACCESSION NUMBER: 2007050476 EMBASE <<LOGINID::20080306>>
 TITLE: Kawasaki disease with coronary artery sequelae.
 AUTHOR: Hibbard J.U.; Fajardo J.E.; Briller J.
 CORPORATE SOURCE: Dr. J.U. Hibbard, University of Illinois at Chicago,
 Department of Obstetrics and Gynecology, M/C 808, 820 South
 Wood Street, Chicago, IL 60612, United States.
 jhibbar@uic.edu
 SOURCE: Obstetrics and Gynecology, (Feb 2007) Vol. 109, No. 2 PART
 2 SUPPL., pp. 517-519.
 Refs: 8
 ISSN: 0029-7844 CODEN: OBGNAS
 PUBLISHER IDENT.: 0000625020070200100015
 COUNTRY: United Kingdom
 DOCUMENT TYPE: Journal; Article
 FILE SEGMENT: 010 Obstetrics and Gynecology
 018 Cardiovascular Diseases and Cardiovascular Surgery
 025 Hematology
 037 Drug Literature Index
 LANGUAGE: English
 SUMMARY LANGUAGE: English
 ENTRY DATE: Entered STN: 13 Feb 2007
 Last Updated on STN: 13 Feb 2007

AB BACKGROUND: Kawasaki disease is an acute febrile illness characterized by mucosal inflammation, skin rash, and cervical lymphadenopathy, with potential for cardiac sequelae, including coronary aneurysms with subsequent thrombosis, infarction, and death. Pregnancy in affected women presents multiple maternal risks. CASE: A woman with Kawasaki disease complicated by coronary aneurysms underwent two consecutive pregnancies without further difficulty. She was maintained on therapeutic enoxaparin, alpha-methyldopa, and labetalol, with labor induction, passive second stage, and continued anticoagulation for 6 weeks postpartum. During gestations she was assessed with echocardiography, electrocardiography, and cardiac event monitor and managed by a maternal-fetal medicine and cardiology team. CONCLUSION: Kawasaki disease with coronary aneurysms presents challenges for obstetric management; obstetricians should be familiar with the disease, implications, and management in pregnancy. .COPYRGT. 2007 The American College of Obstetricians and Gynecologists.

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ACCESSION NUMBER: 2004223222 EMBASE <<LOGINID::20080306>>
 TITLE: [Biochemistry of cervical ripening and dilatation].
 BIOCHEMIE DER ZERVIXREIFUNG UND MUTTERMUNDSEROFFNUNG.
 AUTHOR: Rath W.; Bartz C.
 CORPORATE SOURCE: Dr. W. Rath, Klin. fur Gynakologie/Geburtshilfe,
 Universitätsklinikum Aachen, Pauwelsstrasse 30, 52074
 Aachen, Germany. wrath@ukaachen.de
 SOURCE: Gynakologe, (Apr 2004) Vol. 37, No. 4, pp. 314-320.
 Refs: 38
 ISSN: 0017-5994 CODEN: GYNKAP
 COUNTRY: Germany
 DOCUMENT TYPE: Journal; General Review; (Review)
 FILE SEGMENT: 010 Obstetrics and Gynecology
 002 Physiology
 LANGUAGE: German
 SUMMARY LANGUAGE: English; German
 ENTRY DATE: Entered STN: 10 Jun 2004
 Last Updated on STN: 10 Jun 2004

AB The biochemical mechanisms of cervical ripening and its regulation are yet not fully understood. The cervical ripening phase, which begin 4 weeks prior to the delivery (up to a cervical dilatation of 2-3 cm), is characterized by acatabolic metabolism of proteoglycans and glycosaminoglycans, mainly by a dramatic increase in the hyaluronan concentration associated with increased water uptake and by a significant reduction of collagen concentration within the extracellular matrix. These catabolic transformation processes of the cervix are regulated via cervical fibroblasts by steroid hormones, prostaglandin E(2), cytokines and the NO system. The role of neutrophils and macrophages, which are accumulated in and around cervical vessels at that time, still remains unclear. The cervical dilatation during parturition has been compared to an inflammatory reaction and is characterized by migration, infiltration and degranulation of neutrophils with subsequent release of proteases and collagenases and enzymatic degradation of fundamental matrix proteins, in particular collagen. The increased synthesis of cytokines, in particular IL-1 β and IL-8, and the increased expression of vascular endothelial adhesion molecules play a crucial role in these processes. Recent findings from biochemical research may give new insights in the mechanisms of physiological cervical ripening and "artificial" cervical ripening at induction of labor and may also contribute to the development of more promising approaches in the diagnosis and treatment of prematurity.

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ACCESSION NUMBER: 2003494195 EMBASE <<LOGINID::20080306>>
 TITLE: Spinal cord injury caused by gunshot wound during pregnancy.
 AUTHOR: Gencosmanoglu B.E.; Hanci M.; Yucesoy G.; Madazli R.; Yilmaz H.; Ozgen M.
 CORPORATE SOURCE: Dr. M. Hanci, University of Istanbul, Cerrahpasa Medical School, Department of Neurosurgery, P.O. Box 792, Sisli 80220, Istanbul, Turkey. murath@istanbul.edu.tr
 SOURCE: Journal of Spinal Cord Medicine, (Jun 2001) Vol. 24, No. 2, pp. 123-126.
 Refs: 25
 ISSN: 1079-0268 CODEN: JSCMC3
 COUNTRY: United States
 DOCUMENT TYPE: Journal; Article
 FILE SEGMENT: 010 Obstetrics and Gynecology
 024 Anesthesiology
 037 Drug Literature Index
 038 Adverse Reactions Titles
 008 Neurology and Neurosurgery
 LANGUAGE: English
 SUMMARY LANGUAGE: English
 ENTRY DATE: Entered STN: 5 Jan 2004
 Last Updated on STN: 5 Jan 2004

AB We report a case of a pregnant woman with acute spinal cord injury (C5) caused by gunshot wound and discuss the respective maternal and fetal considerations. Neither decompressive surgery nor corticosteroid protocols were used. At 37 weeks, the patient delivered a normal female infant after induction of labor and epidural anesthesia, with no medical or obstetrical complications. With conservative management and rehabilitation, this patient had significant recovery of function.

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ACCESSION NUMBER: 2003490922 EMBASE <<LOGINID::20080306>>
 TITLE: Spontaneous delivery through perineum, bypassing the vaginal introitus.
 AUTHOR: Tahseen S.; Mclean G.
 CORPORATE SOURCE: Dr. S. Tahseen, 39 Sukey Way, Bowthorpe, Norwich NR5 9NZ, United Kingdom. drtahseen@hotmail.com
 SOURCE: Journal of Obstetrics and Gynaecology, (Nov 2003) Vol. 23, No. 6, pp. 671-672.
 Refs: 5
 ISSN: 0144-3615 CODEN: JOGYDW
 COUNTRY: United Kingdom

DOCUMENT TYPE: Journal; Article
 FILE SEGMENT: 010 Obstetrics and Gynecology
 037 Drug Literature Index
 LANGUAGE: English
 ENTRY DATE: Entered STN: 5 Jan 2004
 Last Updated on STN: 5 Jan 2004

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ACCESSION NUMBER: 2003429937 EMBASE <<LOGINID::20080306>>
 TITLE: Antalya consensus on perinatal care: The report of the
 2(nd) World Congress of Perinatal Medicine for Developing
 Countries, 1-5 October 2002, Antalya, Turkey.
 AUTHOR: Sen C.; Yayla M.; Levene M.
 CORPORATE SOURCE: Dr. C. Sen, University of Istanbul, Cerrahpasa Medical
 School, Dept. Perinatol., Obstet./Gynecol., PO Box:33,
 Cerrahpasa Istanbul-34301, Turkey. csen@obusg.org.tr
 SOURCE: Journal of Perinatal Medicine, (2003) Vol. 31, No. 5, pp.
 361-372.
 ISSN: 0300-5577 CODEN: JPMAO
 COUNTRY: Germany
 DOCUMENT TYPE: Journal; Conference Article; (Conference paper)
 FILE SEGMENT: 010 Obstetrics and Gynecology
 017 Public Health, Social Medicine and Epidemiology
 007 Pediatrics and Pediatric Surgery
 LANGUAGE: English
 SUMMARY LANGUAGE: English
 ENTRY DATE: Entered STN: 13 Nov 2003
 Last Updated on STN: 13 Nov 2003

AB The goal of antenatal care is to help the mother to maintain her well-being and achieve a healthy outcome for herself and her infant. Education about pregnancy, childbearing and childrearing is an important part of antenatal care. Because of the perception that pregnancy is a physiologic event, even today lots of women do not seek medical care until a problem occurs during their pregnancy. There are still unacceptable differences in the extent of perinatal problems in developed and developing countries. Over the last century almost all countries have accepted antenatal care principles. However, insufficiency of resources and a lack of women's compliance have proved to be obstacles in developing countries and have compelled the application of various standard programs. Unfortunately, these programs are not sufficiently effective in preventing and treating maternal mortality. A safe pregnancy and delivery is a human right. Maternal mortality and morbidity should not be ranked with other diseases, because child bearing is not a disease. For this reason a global ethical consideration imposes an obligation upon society to avoid these almost totally preventable deaths. Ensuring access to family planning is an important way of decreasing maternal death. Maternal morbidity and mortality as well as perinatal mortality can be reduced through the synergistic effect of combined interventions, without first attaining high levels of economic development. These interventions include: education for all, universal childbirth, access to family planning services, attendance at birth by professional health workers, access to good quality care in case of complications, and policies that raise women's social and economic status and increase their access to property and the labor force.

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ACCESSION NUMBER: 2002042279 EMBASE <<LOGINID::20080306>>
 TITLE: Misoprostol - For cervical ripening?.
 AUTHOR: Ginath S.; Zakut H.V.
 CORPORATE SOURCE: S. Ginath, Sackler Faculty of Medicine, Edith Wolfson
 Medical Center, Tel-Aviv University, P.O. Box 5, Holon
 58100, Israel. ginath@post.tau.ac.il
 SOURCE: European Journal of Obstetrics Gynecology and Reproductive
 Biology, (1 Dec 2001) Vol. 99, No. 2, pp. 152-153.
 Refs: 30
 ISSN: 0301-2115 CODEN: EOGRAL
 PUBLISHER IDENT.: S 0301-2115(01)00413-4
 COUNTRY: Ireland
 DOCUMENT TYPE: Journal; General Review; (Review)
 FILE SEGMENT: 010 Obstetrics and Gynecology

037 Drug Literature Index
039 Pharmacy
LANGUAGE: English
ENTRY DATE: Entered STN: 7 Feb 2002
Last Updated on STN: 7 Feb 2002

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ACCESSION NUMBER: 2000103321 EMBASE <<LOGINID::20080306>>
TITLE: Questions and answers from the F.I.X. Geriatric
prescribing; vancomycin peaks; adenosine stability;
dalteparin in pediatrics; cervical ripening with
misoprostol.
AUTHOR: Cada D.J.; Russic M.; Pate K.; Unrub W.; Kay; Hulvey J.;
Generali J.; Burns K.; Oertel M.; Whitton K.; Reeves J.;
McFarland K.; Schlom E.
CORPORATE SOURCE: hospitalpharmacy@drugfacts.com
SOURCE: Hospital Pharmacy, (1999) Vol. 34, No. 11, pp. 1291-1294.
ISSN: 0018-5787 CODEN: HOPHAZ
COUNTRY: United States
DOCUMENT TYPE: Journal; (Short Survey)
FILE SEGMENT: 037 Drug Literature Index
039 Pharmacy
LANGUAGE: English
ENTRY DATE: Entered STN: 6 Apr 2000
Last Updated on STN: 6 Apr 2000

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ACCESSION NUMBER: 1993168772 EMBASE <<LOGINID::20080306>>
TITLE: A physician's prerogative to prescribe drugs for off-label
uses during pregnancy.
AUTHOR: Rayburn W.F.
CORPORATE SOURCE: Dr. W.F. Rayburn, Department of Obstetrics/Gynecology,
Univ. Oklahoma Health Scis. Center, P.O. Box 26901-4SP701,
Oklahoma City, OK 73190, United States
SOURCE: Obstetrics and Gynecology, (1993) Vol. 81, No. 6, pp.
1052-1055.
ISSN: 0029-7844 CODEN: OBGNAS
COUNTRY: United States
DOCUMENT TYPE: Journal; (Short Survey)
FILE SEGMENT: 010 Obstetrics and Gynecology
017 Public Health, Social Medicine and Epidemiology
030 Clinical and Experimental Pharmacology
037 Drug Literature Index
006 Internal Medicine
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 11 Jul 1993
Last Updated on STN: 11 Jul 1993

AB Physicians frequently prescribe drugs for indications other than those on the product label. Reasons for such off-label use during pregnancy include: prevention of repetitive abortion, inhibition of premature labor, reduction of fetal or neonatal infection, reduction in development of preeclampsia and its complications, and ripening of the cervix or induction of labor. A physician has a legal right to prescribe for off-label indications despite regulatory, manufacturer, and cost constraints. Such prescribing habits would not be considered experimental if based on sound scientific evidence. Adequate and well-controlled studies are difficult to perform during pregnancy. Evidence of widespread use and support from another qualified clinician are methods of justifying off-label prescribing. Each patient is entitled to know why she and her fetus would benefit from the treatment and whether any unnecessary risk is anticipated. Legible documentation of these discussions in the medical records is important.

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ACCESSION NUMBER: 1985088102 EMBASE <<LOGINID::20080306>>
TITLE: Intrauterine fetal demise and hemostatic failure: The fetal death syndrome.
AUTHOR: Romero R.; Copel J.A.; Hobbins J.C.

CORPORATE SOURCE: Yale University School of Medicine, Department of
Obstetrics and Gynecology, New Haven, CT 06510, United
States
SOURCE: Clinical Obstetrics and Gynecology, (1985) Vol. 28, No. 1,
pp. 24-31.
ISSN: 0009-9201 CODEN: COGYAK
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 010 Obstetrics and Gynecology
018 Cardiovascular Diseases and Cardiovascular Surgery
025 Hematology
037 Drug Literature Index
LANGUAGE: English
ENTRY DATE: Entered STN: 10 Dec 1991
Last Updated on STN: 10 Dec 1991

AB Aggressive management of the patient with a fetal demise has made the prolonged retention of a dead fetus a rare cause of coagulopathy in modern obstetrics. The availability of ultrasonography and effective means of induction of labor have virtually eliminated the delay in uterine evacuation due to diagnostic uncertainty or fear of failure of induction. However, all patients with a fetal demise should be screened for coagulation abnormalities prior to the emptying of the uterus. The management of the patient without DIC is straightforward: induction of labor with either oxytocin infusion or prostaglandins, in the absence of the usual obstetric contraindications. The management of the patient with DIC due to a retained death fetus depends on the state of hemostatic compensation and whether or not the patient is in labor. If the DIC is either compensated or overcompensated, the risk of hemostatic failure is small, and one should deliver the dead infant as expeditiously as possible in order to suppress the source of the excessive thrombin generation. The duration of the pregnancy and the state of cervical ripeness will determine whether oxytocin or prostaglandin preparations should be used for induction. If the patient has decompensated DIC, the management objective should be to minimize the risk of peripartum hemorrhage through restoration of hemostatic levels of consumed coagulation factors prior to delivery. This can be accomplished by the administration of heparin if the patient is not in labor, or by supplying the consumed factors with blood component therapy if labor is in progress.

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ACCESSION NUMBER: 1981095534 EMBASE <<LOGINID::20080306>>
TITLE: [Iatrogenic accidents in obstetrics].
LES ACCIDENTS IATROGENES EN OBSTETRIQUE.
AUTHOR: Magnin P.; Berland M.; Evreux J.C.; et. al.
CORPORATE SOURCE: Clin. Obstet., Pav. K, Hop. Edouard Herriot, 69374 Lyon
Cedex 2, France
SOURCE: Revue Francaise de Gynecologie et d'Obstetrique, (1981)
Vol. 76, No. 2, pp. 147-166.
ISSN: 0035-290X CODEN: RFGOAO
COUNTRY: France
DOCUMENT TYPE: Journal
FILE SEGMENT: 010 Obstetrics and Gynecology
037 Drug Literature Index
038 Adverse Reactions Titles
LANGUAGE: French
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 9 Dec 1991
Last Updated on STN: 9 Dec 1991

AB Iatrogenic accidents may occur during drug treatment or obstetric procedures. Drugs administered to pregnant women have one physiological peculiarity: the foetus, mother and placenta form one unit. The most important risks are encountered by the foetus. They are various and, apart from certain well-known malformations, one should emphasize the coagulation disorders induced in the newborn by anticonvulsants administered to the mother during pregnancy. In regard to the maternal complications due to drugs, premature labor represents the greatest danger, mainly due to the cardiovascular effects of sympathomimetic substances. Apart from these drug prescriptions, obstetric procedures may cause a certain number of accidents:

cervical dystocia after cervical suture, foetal distress after amniocentesis during the third trimester of pregnancy by accidental puncture of a placental or funicular vessel, uterine or cervical rupture or hemorrhagic complications during therapeutic abortion during the second trimester; induction of labor, and perfusion of oxytocin during labor, may cause well-known uterine complications, and recently attention has been drawn to neonatal hyperbilirubinemia favoured by oxytocin. Even obstetric monitoring is not without risks, and cases have been reported of uterine or placental perforation via the catheter used in internal tocography, and foetal injuries due to the scalp electrode. Cesarean section causes a certain number of complications which are becoming increasingly frequent with the increasing number of these operations. Neonatal resuscitation may itself cause certain complications: infection, portal thrombosis, or air embolism after injection of solutions into the umbilical vein; also accidents of severe ischemia due to the accidental injection of hypertonic solutions into the umbilical artery, ocular complications of oxygen in incubators, infective and cardiovascular risks of pharyngeal aspiration. As far as anaesthesia in obstetrics is concerned, a certain number of accidents have been reported due to general anesthesia (maternal bronchopulmonary inhalation, allergy) local anesthesia (epileptic fits, headaches, hypertension), intensive care (pulmonary oedema, hemorrhage after heparin, transfusion accidents due to antibodies). Finally, in a recent paper on maternal mortality in a series of 242 cases, there were 10 deaths attributed to iatrogenic causes.

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ACCESSION NUMBER: 1993:482571 BIOSIS <<LOGINID::20080306>>
 DOCUMENT NUMBER: PREV199396116171
 TITLE: Prevention of fetal loss in experimental antiphospholipid syndrome by low-molecular-weight heparin.
 AUTHOR(S): Inbar, Oded; Blank, Miri; Faden, David; Tincani, Angela; Lorber, Margalit; Shoenfeld, Yehuda [Reprint author]
 CORPORATE SOURCE: Dep. Med. B, Sheba Med. Cent., Tel Hashomer 52621, Israel
 SOURCE: American Journal of Obstetrics and Gynecology, (1993) Vol. 169, No. 2 PART 1, pp. 423-426.
 CODEN: AJOGAH. ISSN: 0002-9378.
 DOCUMENT TYPE: Article
 LANGUAGE: English
 ENTRY DATE: Entered STN: 22 Oct 1993
 Last Updated on STN: 23 Oct 1993

AB Objective: The purpose of this study was to compare the effectiveness of low-molecular-weight heparin with regular heparin in the prevention of fetal resorption in mice with the antiphospholipid syndrome. Study Design: Antiphospholipid syndrome was passively induced in ICR mice by injecting them with anticardiolipin antibodies on the first day of pregnancy. Subsequently, these mice were treated with low-molecular-weight heparin in two different doses, with regular heparin, and with a placebo. On gestational day 17 the mice were killed by cervical dislocation, and the pregnancy outcome was evaluated. Statistical analysis was performed by means of a one-way analysis of variance using Bonferroni's t test. Results: Treatment with low-molecular-weight heparin resulted in a resorption rate of 22.4% as opposed to 41.4% in mice with antiphospholipid syndrome that were given regular heparin and 51.7% in nontreated controls. Conclusion: We conclude that low-molecular-weight heparin can prevent fetal resorption in mice with antiphospholipid syndrome.

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ACCESSION NUMBER: 1982:302709 BIOSIS <<LOGINID::20080306>>
 DOCUMENT NUMBER: PREV198274075189; BA74:75189
 TITLE: EFFECTS OF SEX STEROID HORMONES AND PROSTAGLANDINS ON THE SYNTHESIS OF GLYCOSAMINO GLYCANS IN CULTURED CELLS FROM THE HUMAN UTERINE CERVIX.
 AUTHOR(S): TANAKA M [Reprint author]
 CORPORATE SOURCE: DEP OBSTETRICS AND GYNECOL, NAGOYA CITY UNIV MED SCH, MIZUKO-KU, NAGOYA 467
 SOURCE: Nagoya Medical Journal, (1981) Vol. 26, No. 3, pp. 109-123.
 CODEN: NMJOAA. ISSN: 0027-7649.

DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH

AB To clarify the mechanism of hormonal regulation on the ripening of the uterine cervix during late pregnancy and labor, the effects of sex steroid hormones and prostaglandins (PG) on the synthesis of glycosaminoglycans (GAG) were studied in cultured cells derived from the human uterine cervix. Estradiol-17 β (E2) induced a marked increase in the radioactivity of ¹⁴C-glucosamine-incorporated substance, which was ascertained to be mainly hyaluronic acid as identified by Dowex 1-X2 column chromatography and electrophoresis on cellulose acetate membrane. This action of E2 was inhibited by progesterone. PG[prostaglandin]E1, PGE2 and PGF2 α had a stimulant effect on the synthesis of GAG, particularly hyaluronic acid. Sex steroid hormones and PG may contribute to cervical ripening during late pregnancy and labor by increasing the synthesis of GAG in the cervical tissue.